

In The United States Court of Appeals
For the Ninth Circuit

COMPANIA NAVIERA LIMITADA, a corporation, claim-
ant of the Motor Tanker "URANIA," Her Engines,
Tackle, Apparel, Furniture and Equipment,
Appellant,

vs.

E. A. BLACK and J. J. FEATHERSTONE, Copartners
doing business under the name and style of Com-
mercial Ship Repair,
Appellee.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON,
NORTHERN DIVISION

BRIEF OF APPELLANT

MERRITT, SUMMERS & BUCEY,
LANE SUMMERS,
CHARLES B. HOWARD,
Proctors for Appellant.

840 Central Building,
Seattle 4, Washington.

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Appellant,

vs.

E. A. BLACK and J. J. FEATHERSTONE, Copartners doing business under the name and style of Commercial Ship Repair,

Appellee.

No. 12322

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON,
NORTHERN DIVISION

BRIEF OF APPELLANT

JURISDICTION

This action was commenced by a libel in rem (Aps. 2) in admiralty filed in the District Court at Seattle against the respondent Motor Tanker "Urania," owned by appellant. The appellees as libelants sought to recover a sum of money alleged to represent the unpaid balance due and owing for material, labor and services furnished in connection with the overhaul and repair of the "Urania" at appellees' shipyard near Seattle.

Appellant filed answer to the libel (Aps. 15) and cross-libel against appellees (Aps. 18). Appellant alleges in the cross-libel that it is entitled to recover a

sum of money as damages representing losses sustained and expenses incurred as a result of appellees' nonperformance or malperformance of their contract obligations with respect to repairs, renewals and additions to the vessel.

Jurisdiction of the District Court is based upon Title 28 U.S. Code, Section 1333, which provides for original jurisdiction of any civil cause of admiralty or maritime jurisdiction in the District Courts of the United States. Final Decree (Aps. 90) was entered by the District Court in favor of appellees on their libel and against the appellant on its cross-libel.

This appeal is from such Final Decree. Jurisdiction of this Court is based upon Title 28 U.S. Code, Section 1292, which provides that the Courts of Appeals shall have jurisdiction of all appeals from final decisions of the District Courts of the United States.

STATEMENT OF CASE

The Motor Tanker "Urania" is a vessel of 165-foot over-all length, 32-foot beam and 15-foot depth, powered by a 560-horsepower diesel engine built by Union Diesel Engine Company, Oakland, California. It has eight cargo tanks designed to carry various types of liquid cargoes. The "Urania" was built for the U. S. Navy and was purchased by appellant on August 4, 1948, at Seattle (Aps. 476).

The appellant, a Panamanian corporation, as owner, registered the "Urania" under the Panamanian flag and a crew of 17 officers and men were provided for its operation, under command of Andreas Beis as

Master and Panaiotis Baxevanis as Chief Engineer (Aps. 477-478).

Demetri Antippas, a director and technical adviser of the appellant corporation, and a graduate of Athens College, Durham University (England) and Massachusetts Institute of Technology, in naval architecture and marine engineering (Aps. 474-475), came to Seattle about August 2, 1948, to consummate the purchase of the "Urania" and arrange for repairs and alterations to the vessel to adapt her for carrying commercial cargoes. Harry F. Williams of New York also came to Seattle to assist Antippas in this work. Williams had been employed from time to time by appellant as a port engineer (Aps. 479).

Certain specifications had been obtained by appellant in New York for extensive modification and conversion of the "Urania" type of vessel. Through appellant's agents at Seattle, quotations or bids were obtained for performing certain of the work set forth in the specifications (Aps. 480-482). Appellees, doing business as Commercial Ship Repair (Aps. 170), submitted a bid of \$39,780.00 (Respondent's Exhibit A-1; Aps. 228), which provided for completion of the specified work in eighteen (18) working days. Appellees' bid was not the low bid (Aps. 173, 482), but was finally accepted by appellant after some further negotiation and adjustment as to items of work and prices, the agreed price then being \$40,155.00 plus \$1500.00 if certain additional work was ordered performed (Aps. 196, 484-486).

Demetri Antippas left for New York the same night

that appellees' bid was accepted (Aps. 489). Harry F. Williams remained at Seattle to oversee and supervise the work for appellant (Aps. 323, 486-487). The extent of Williams' authority to bind appellant as to additional work and prices for work performed by appellees on the "Urania" was an issue having a direct bearing upon the appellees' right to recover for the full balance alleged to have been due for repairs and alterations after giving credit for \$25,000.00 voluntarily paid by appellant to appellees on account during the course of the work (Aps. 491-493).

While the "Urania" was at appellees' shipyard during August, September and October, 1948, certain additional work was performed on the vessel by appellees at the request of Harry F. Williams (Aps. 251; listed on libelants' Exhibits No. 4, Aps. 254; and No. 7, Aps. 312). This additional work included cleaning, testing and repair of the lubricating oil cooler on the main engine (Item No. 1, Libelants' Exhibit No. 4, Aps. 257, 1445) and repair of Clayton heating boiler (Item No. 14, Libelants' Exhibit No. 4, Aps. 262).

In performing the specified work on the lubricating oil cooler, workmen from appellees' repair yard went aboard the vessel and removed the cooler to the appellees' pipe shop (Aps. 716, 1446) where one of appellees' workmen testified that, after cleaning, a 50-pound pressure test was applied to each end of the cooler by attaching a water hose to the cooler piping (Aps. 1439). No leaks were found (Aps. 1458), and no repairs were made on the oil cooler in the shop, other than installing new gaskets and new zinc pencils

in the unit (Aps. 1441, 1449). All of the work on the lubricating oil cooler was done by appellees' workmen without participation by members of the crew (Aps. 716, 738-9).

A Clayton heating boiler was installed aboard the "Urania" for purposes of furnishing steam heat to crew's quarters and in the heating coils of the cargo tanks. Appellees' workmen removed the pump unit of the Clayton boiler from the ship to the shops ashore for overhaul under the extra work contract (Item No. 14, Libelants' Exhibit No. 4, Aps. 262). The pump unit was dismantled, parts renewed and re-assembled (Aps. 1475). After reinstallation by appellees aboard the "Urania" it failed to function properly, necessitating corrective repairs at Seattle (Aps. 759) and at Los Angeles (Aps. 825). The details of this work and appellant's charges of mal-performance against appellees on this damage will be discussed later in this brief.

The vessel's telemotor steering engine and controls were tested by appellees under the original fixed price contract (Item 26 of Libelants' Exhibit No. 1, Aps. 186), and appellees reported the same to be in good running order after oiling and adjusting the parts (Aps. 1472-4).

The "Urania" departed from the appellees' shipyard on Puget Sound, after repairs and alterations were completed, on October 16, 1948 (Aps. 656), to proceed in ballast to the Panama Canal for further orders (Aps. 655). Within a few hours of departure, the vessel's telemotor steering gear broke down, necessitating use of emergency steering gear until the

vessel reached Port Angeles on the morning of October 16, 1948 (Aps. 656). Through the shipowner's Seattle agents, arrangements were made to fly repairmen from appellees' shipyard to Port Angeles, where repairs were made to the steering system and the vessel resumed its voyage on the evening of October 16 (Aps. 657).

While en route to the Panama Canal, and while off the west coast of Mexico on October 26, difficulty was experienced with the operation of the main engine, eventually resulting in the master deviating from his course to the nearest port, Manzanillo, Mexico, arriving on October 28, to enable emergency repairs to be made on the main engine (Aps. 660-661, 729).

A service engineer employed by the manufacturer of the main engine was, at appellant's request, flown from Oakland, California, to Manzanillo with spare parts to effect repairs (Aps. 896, 985). Practically no repair facilities were available ashore at the port of Manzanillo (Aps. 992). The service engineer checked alignment of engine parts, made adjustments, and replaced certain vertical shaft gears which he found badly worn, scuffed and galled (Aps. 986). With the service engineer aboard, the "Urania" departed from Manzanillo to return to Los Angeles where it was contemplated that more complete repairs would be made (Aps. 996). After being under way approximately 36 hours the main engine failed to function properly, necessitating a call for assistance of a salvage tug, which towed the vessel into Los Angeles, where it arrived on November 11, 1948 (Aps. 662-3, 1008-9).

At Los Angeles, surveyors for the American Bureau of Shipping (Aps. 1145) and for Lloyds Underwriters (Aps. 1203), owner's appointed surveyor (Aps. 1242), and representatives of the main engine manufacturer (Aps. 892-895, 1009-1015, 1088-97), examined the main engine of the "Urania." The lubricating oil cooler was removed from the engine and tested ashore (Aps. 1121-1123). It was then discovered that certain leaks existed in the soldered seam separating the core from the casing of the cooler (Aps. 1097-1101, 1124-1125 and Libelants' Exhibit 15, Aps. 1143).

The oil passing through tubing in this lubricating oil cooler from the main engine is cooled by salt water passing through jackets in the cooler, similar to the functioning of a radiator on an automobile, except that sea water is used as a coolant instead of air (Aps. 876-7).

The above mentioned surveyors and engine manufacturer's representatives testified that the infiltration of salt water coolant through the leaks into the lubricating oil in the cooler caused a contamination of the oil, resulting in the galling and wearing of the gears that eventually failed in the main engine of the vessel (Aps. 1212-13, 1267-69, 1273, 1283). These qualified expert witnesses, who examined the engine personally upon arrival of the vessel at Los Angeles, expressed the opinion that this leakage of salt water in the lubricating oil cooler, resulting in contamination of the oil, was the cause of the main engine breakdown (Aps. 913, 934, 948, 950-51, 962, 972, 1212-13, 1267-69, 1283).

After repairs to the main engine, auxiliaries and other parts of the vessel were completed at Long Beach, the vessel was tested on a sea trial and found to operate satisfactorily (Aps. 1160-61). The vessel departed from Los Angeles on November 17 and resumed voyage to the Panama Canal with the service engineer for the main engine manufacturer aboard (Aps. 745). The main engine functioned satisfactorily en route, hence the service engineer was disembarked at Manzanillo, Mexico, on November 23 (Aps. 1019-20, and Respondent's Exhibit A-8, in original form per stipulation and order, Aps. 1729-33). The vessel proceeded to its destination without further difficulty with the main engine (Aps. 745-6).

The various elements of damage claimed by appellant under the cross-libel (Aps. 18) fall within the following general categories:

- (a) Cost of corrective repairs;
- (b) Towing charges after breakdown;
- (c) Operation expense on vessel during periods of deviation and delay for repairs;
- (d) Loss of profits during periods of deviation and delay; and
- (e) Miscellaneous incidental expenses, including additional fuel consumed.

The total amount claimed in the cross-libel as amended (Aps. 166-67) was the sum of \$36,329.37. Further reductions and eliminations have reduced the amount now claimed by appellant on this appeal to the sum of \$25,219.41 as set forth in detail later in this brief under Damages.

SPECIFICATION OF ASSIGNED ERRORS RELIED UPON BY APPELLANT

Appellant relies on Assignments of Errors numbered 6, 7, 8, 9, 10, 12 and 13 (Aps. 117-127). Because of the length of these Assignments of Errors they are printed herein as an appendix to the brief, and are summarized in each case before the argument addressed to the particular assignment of error.

In essence, the Assignments of Error relied upon by appellant relate only to its right to recover from appellees on the cross-libel for the various elements of damage caused by the breakdowns and delays to the "Urania" due to nonperformance or malperformance of appellees' contractual obligations with respect to repairs, renewals, alterations and additions to the vessel.

ARGUMENT

Since this case is in admiralty, "an appeal opens the case for a trial *de novo*." *Maui-Absaroka* (9 CCA) 1945 A.M.C. 767, 771, 149 F.2d 295. In such circumstances this Court has held that there is a "rebuttable '*prima facie*' presumption that the findings of the District Court are correct." *Eureka-Ernest H. Meyer* (9 CCA) 1936 A.M.C. 1179, 1187, 84 F.2d 496. But this Court has always recognized that the value of this presumption, and the weight given to it, is lessened where some of the witnesses testify in person before the District Court and some of the testimony is given by deposition. *Maui-Absaroka, supra*; *U.S.A. v. Lubinski* (9 CCA) 1946 A.M.C. 483, 486, 153 F.2d 1013; *Johnson, Adm. v. Griffiths S.S. Co.* (9 CCA)

1945 A.M.C. 887, 889, 150 F.2d 224. Thus, in *Eureka-Ernest H. Meyer, supra*, this court stated:

“It is obvious that where the testimony is in part in deposition and in part heard by the court, and the conflict is between the heard and unheard witnesses, there cannot be a balancing of credibility between the two. In such a case and where all or substantially all of the evidence pertinent to the finding is given by deposition the presumption is of lesser weight and more easily may be rebutted. *Natal* (9 CCA) 1926 A.M.C. 1235, 14 F.2d 382, 384.”

Eureka-Ernest H. Meyer (9 CCA) 1936 A.M.C. 1179, 1187.

This rule becomes particularly important on this appeal when it is realized that eleven witnesses called by appellant to establish the nature and cause of the breakdowns on the vessel all testified by deposition. They were men experienced in the field of marine engineering or related activities, of unquestioned ability and credibility, and they testified as to facts and opinions based on their own personal observations and findings aboard the “Urania” after the breakdowns crippled the ship on its first voyage. Their testimony, even though by deposition, is entitled to great weight as opposed to the mere opinions of appellees’ witnesses based on hypothetical questions. Furthermore, most of appellees’ witnesses fall within the category of interested witnesses by reason of direct connection with appellees through employment or business relationship.

Again, as to the findings of the trial judge, this Court has not hesitated, in determining appeals in

admiralty cases, to reject the findings of the trial court when not supported by the evidence. *The Wildwood* (9 CCA) 1943 A.M.C. 320, 326, 133 F.2d 765; *Johnson, Adm. v. Griffiths S.S. Co.* (9 CCA) *supra*, and *Maui-Absaroka*, *supra*.

This appeal involves primarily a question of fact, which in turn requires a careful analysis of the testimony relating to the nature of repairs made by appellees before departure of the ship, together with testimony as to the findings of the surveyor and others who boarded the ship and inspected the various parts of machinery upon arrival of the "Urania" at Port Angeles, Manzanillo and Los Angeles after breakdowns.

Clarity of understanding suggests discussion under three principal headings:

First, the main engine breakdowns, involving Assignments of Error numbered 8, 9, 10 and 13;

Second, the failure of the Clayton heating boiler and telemotor steering system, involving Assignments of Error numbered 6, 7 and 13;

Third, various elements of appellant's damages, including assigned error relating to the admission of evidence of loss of profits in operation of the vessel (Assignment of Error 12).

I. Main Engine Breakdown

Under Assignments of Errors 8, 9, 10 and 13 appellant contends its evidence offered in the District Court clearly proved that as the direct result of faulty repairs by the appellees to the main engine a break-

down occurred shortly after the "Urania" left appellees' shipyard.

The "Urania" completed repairs and departed from appellees' shipyard on Puget Sound on October 16, 1948 (Aps. 656). The first breakdown of the main engine occurred at sea on October 26 (Aps. 659), approximately ten days later. This breakdown of the main engine was found by the engine manufacturer's service engineer, who inspected the engine at Manzanillo, Mexico, to be due to a galling and failure of the helical timing gears in the vertical shaft of the main engine, particularly the lower gears (Aps. 986).

The second breakdown occurred at sea on November 5, 1948 (Aps. 1007), after emergency repairs, including replacement of lower vertical shaft gears, had been completed at Manzanillo (Aps. 988) and while the vessel was en route back to Los Angeles for more extensive repairs on the main engine (Aps. 1043, 1062). This second breakdown of the main engine was also found by the service engineer to be due to galling of the same gears (Aps. 1048).

After the "Urania" arrived in Los Angeles (Long Beach) on November 11, it was established by the personal inspection and surveys of the following experienced and disinterested witnesses that the two above mentioned breakdowns were caused by contamination of the lubricating oil with salt water, resulting in galling and failure of the helical timing gears on the vertical shaft of the main engine.

Mr. E. W. Pike, surveyor for the American Bureau of Shipping at Los Angeles (Aps. 1145), conducted a

survey on the main engine. He stated in his testimony by deposition that he found salt water in the lubricating oil (Aps. 1149, 1174). His survey report (Respondent's Exhibit A-21, Aps. 1322) confirms his oral testimony.

Mr. George M. Dupuy, marine surveyor, conducted a survey on the main engine for Lloyds underwriters or Lloyds Agents (Aps. 1208). He stated in testimony by deposition that he found the oil remaining in the crankcase of the main engine to be emulsified "as if it had been contaminated with water" (Aps. 1210) and his Report of Survey (Respondent's Exhibit A-22, Aps. 1324-29) states that he found "evidence of salt water in lube oil system" (Aps. 1326). As to the breakdown, Mr. Dupuy testified by deposition that "in my opinion from the observations I made of it—the cause of it was the contamination of the lube oil system through the leakage of the cooler" (Aps. 1212-13).

Mr. Harry J. Summers, who had been with the American Bureau of Shipping for over thirty years as a principal surveyor, was called to make a survey of the main engine at the request of the Los Angeles agents for the appellant, owner of the vessel (Aps. 1242-43). He testified by deposition that he examined the oil remaining in the crankcase upon arrival of the "Urania" at Los Angeles on November 11 and found water in the oil (Aps. 1249). From samples taken of this mixture of oil and water he determined by tasting that it was salt water mixed with the lube oil (Aps. 1250). He further testified that the "gear failure was the primary cause of the failure of the

operation of the propeller machinery" (Aps. 1267) and that "In my opinion the gears failed because of faulty lubrication rather than misalignment" (Aps. 1269). On cross-examination he stated further "faulty lubrication should cause a galling or spalling of the teeth in the helical gears and the continued spalling and the continued grinding would serve to destroy those gears in a comparatively short length of time after the first failure of any one tooth; that would be my opinion" (Aps. 1283).

Mr. S. W. Newell, vice president of the Union Diesel Engine Company, and a graduate of Webb Institute of Naval Architecture with degree in Naval Architecture and Marine Engineering (Aps. 870-71) testified by deposition that he personally found oil mixed with water in the crankcase of the main engine aboard the "Urania" when he went aboard the vessel on November 12 at Long Beach (Aps. 892-94). He sampled the mixture by tasting and was positive in his analysis that it contained salt water (Aps. 894-95). He later testified: "I believe that the salt water found its way into the lubricating oil through the lubricating oil cooler" (Aps. 934). On cross-examination by appellees' counsel the following question and answer were given (Aps. 950-51):

"Q. (By Mr. Hokanson): And yet you would say that the contaminated oil, not affecting any other bearings which bear the main weight of the engine nevertheless caused the galling of the timing gears?

A. Yes, that is correct."

The witness then explained his answer by pointing

out that a greater pressure exists on the helical timing gears that failed in the "Urania" engine than exists under the same operating conditions in bearings lubricated from the same source (Aps. 951).

Mr. N. A. Cross, the service engineer for Union Diesel Engine Co., also verified by taste test the finding of salt water in the lube oil in the sump of the main engine upon arrival of the "Urania" in Los Angeles (Aps. 1067). He attributed the salt water in the oil "to the fact that it was coming from the oil cooler" (Aps. 1059).

Mr. M. L. Newell, another service representative for Union Diesel Engine Co. (Aps. 1088) also confirmed that the oil in the crankcase of the "Urania" was contaminated on the day that the vessel arrived at Los Angeles in November (Aps. 1090).

Having established the cause of the two main engine breakdowns by the above witnesses, the appellant then produced testimony which eliminated any other possible cause of the breakdowns.

Thus, S. W. Newell testified that in his opinion, based on his experience with engines of this type and his personal observations, no cause other than the contamination of the oil could possibly have contributed to cause either the first or second breakdown of the main engine (Aps. 948, 972). He also testified that breakdowns of this type could not be caused by a loose part falling into the gears, since such an occurrence would cause an immediate and complete stoppage in operation of the engine (Aps. 974, 978), which was not true as to either of the breakdowns of the "Urania" main

engine. Service engineer Cross testified to the same effect as to a part or foreign object falling into the gears (Aps. 1022-23) and further stated that there was no evidence found of such an occurrence in his inspection of the engine and gears of the "Urania" when opened up (Aps. 1067).

Effort was made by appellees to establish that a misalignment or bend in the shaft of the engine might explain the galling and failure of the timing gears. All witnesses interrogated on this subject agreed that design of these parts of the engine and absence of any evidence of misalignment completely eliminated misalignment as a possible cause of the breakdowns. This includes the testimony of Mr. Pike of American Bureau of Shipping (Aps. 1155, 1173), Mr. Dupuy, representing Lloyds (Aps. 1209, 1214), Mr. Summers representing the owners (Aps. 1248, 1254) and the following representatives of Union Diesel Engine Company: Mr. Cross (Aps. 987, 1001-02, 1012, 1068) and M. L. Newell (Aps. 1111-12).

Likewise, effort of appellees to establish misalignment of the gears or bearings in the engine as a possible cause of the breakdowns was overcome by the testimony of qualified expert witnesses interrogated on the subject to the effect that no misalignment was found on inspection of such parts. These witnesses included Mr. Pike (Aps. 1173); Mr. Dupuy (Aps. 1209, 1220-22); Mr. Summers (Aps. 1254-55, 1273, 1281); Mr. Cross who examined the gears and bearings at Manzanillo (Aps. 988, 1029, 1068), at sea before the second breakdown (Aps. 1008) and at Los Angeles (Aps. 1012); Mr. S. W. Newell, who stated it

was not physically possible for misalignment of the gears to cause the galling found to exist (Aps. 953-5); and Mr. M. L. Newell (Aps. 1091, 1096).

Extraordinary wear on the bearings or gears was advanced by appellees as a possible cause of the galling and breakdown. However, Mr. Pike testified that he found no wear out of the ordinary in the main or crank bearings (Aps. 1176). As to the spur gears, Mr. Dupuy testified that "They showed no excess wear" (Aps. 1225). M. L. Newell testified that upon opening the base plates to inspect the crankshaft immediately after arrival of the "Urania" at Los Angeles "there was no indication of wear of anything there, such as if a bearing had been burned out, but the oil appeared to be contaminated" (Aps. 1090).

In contrast to the clear and positive testimony of appellant's witnesses, the appellees produced several witnesses who testified as to opinions based on long and involved hypothetical questions. These witnesses included Frank H. Gallagher, surveyor for the American Bureau of Shipping, who had been in attendance at various times during the course of overhaul and repair work on the "Urania" at appellees' yard (Aps. 1682-83); J. D. Gilmour, marine surveyor, who made a survey aboard the "Urania" at appellees' request on October 15, 1948, the day before the vessel departed from appellees' yard on its ill-fated voyage (Aps. 1512); and Frank E. Blumberg, a mechanical engineer (Aps. 1554) who apparently was never aboard the "Urania." In addition, appellees called as a witness Herman Sanwick, a marine engineer in their employ at the time of the trial, but who was not working at the yard at

the time of the "Urania" repair and overhaul (Aps. 1606-07) and had apparently never been aboard the vessel.

These witnesses called by appellees attempted, in answer to hypothetical questions containing many assumptions, to express opinions which were inconsistent with and contradicted the positive findings of appellant's witnesses who examined the main engine and lube oil cooler at Los Angeles after the breakdown. Two of appellees' witnesses expressed the opinion that the galling of the gears could not have occurred in the manner described by appellant's fact witnesses (Gilmour, Aps. 1496; Blumberg, 1569). Yet both of these witnesses later conceded on cross-examination that their opinions were based on the assumption that there was no contamination of the oil passing through the lube oil cooler (Gilmour, Aps. 1518; Blumberg, Aps. 1591). We submit that, in view of the positive, uncontradicted testimony as to leaks found in the cooler when tested after engine breakdowns, the opinions of these witnesses based on such assumptions can be of little or no value. Again, appellees' witness Gallagher, an American Bureau surveyor, gave the following testimony (Aps. 1666):

"Q. (continued): the contamination of the lube oil would be the cause of the galling of the gears; the timing gears?

A. Very possible."

The trial court, in rendering decision, was apparently persuaded by the argument advanced by appellees that the "occurrence of the main engine's failure off Manzanillo was about eleven (sic) days after the ves-

sel left Seattle" (Aps. 72). Yet appellees' own witness, Mr. Gallagher, stated that "before, in my opinion, complete breakdown would result, why the cause thereof would have been progressive" (Aps. 1673). Mr. Sanwick, another witness for appellees, was interrogated on the same point and he stated: "Yes, it could be progressive contamination of the oil" (Aps. 1622).

From the above documentation of the pertinent testimony we submit that the court must find that appellant has established by a convincing preponderance of the evidence that the two breakdowns of the main engine were caused by salt water contamination of the oil used to lubricate the main engine of the "Urania," resulting in faulty lubrication, which in turn caused the galling and failure of the helical timing gears in the vertical shaft, particularly the lower timing gears.

It then becomes necessary to determine what caused the contamination of the lubricating oil. Appellant undertook to prove this contamination to be due to leaks in the seams separating the salt water coolant from the oil in the lubricating oil cooler, permitting salt water to penetrate into the lube oil side of the cooler and contaminate the oil. The following testimony clearly established this to be the source of contamination.

Mr. Pike of American Bureau of Shipping testified that he personally verified leaks existing in the oil cooler upon testing it ashore at Los Angeles (Aps. 1153) and identified the location of the leaks as at the seams in the cooler (Aps. 1154). These leaks were reported in his written survey (Respondent's Exhibit A-21, Aps. 1322-24).

Mr. Dupuy of Lloyds testified that leaks found in the oil cooler upon testing it at Los Angeles (Aps. 1210) and his report of survey (Respondent's Exhibit A-22, Aps. 1326-27) stated that "Lube oil cooler found leaking between salt water cooling and lube oil side, allowing salt water to contaminate the lube oil."

Mr. Summers, owner's surveyor, testified that "From my observation, I would say that the lubricating oil was contaminated because of leakage in the heat exchangers of the lubricating oil coolers. You wouldn't have to get very much salt water in the oil to make it so that it isn't a very effective lubricant" (Aps. 1269). He testified as to personal observation of the leaks in the oil cooler (Aps. 1271) and his report of survey confirmed his findings and opinion (Respondent's Exhibit A-23, Aps. 1345-47).

William Weiler, a radiator repairman employed by United Motors Service at Long Beach, testified that he himself tested the lube oil cooler when brought to the shop from the vessel for repairs (Aps. 1119-21). He described the leaks as appearing in the soldered seam where the core containing the tubes was soldered into the housing or casing (Aps. 1123, 1136). He illustrated the location of these leaks in the cooler on rough sketch (Libelants' Exhibit 15, Aps. 1143) as point Number 2 on Sketch A, (Aps. 1137).

M. L. Newell of Union Diesel Engine Company was present when Weiler tested the coolers (Aps. 1099) and observed "a lot of leaks around the edge of the honeycomb core, right in the line of the solder marks

where it was soldered into the casing" (Aps. 1100). He testified that on the lubricating oil cooler they found six leaks on one side and seven leaks on the other side (Aps. 1106). Mr. Cross (Aps. 1025) and Mr. S. W. Newell (Aps. 939-40) also testified as to the discovery of these leaks in the oil cooler.

Mr. Cross testified that upon first opening up the heat exchangers (coolers) upon arrival at Long Beach he found an abnormal amount of scale on the salt water side (Aps. 1012). Mr. S. W. Newell testified that it was not reasonable to assume that this scale would have formed in the oil cooler, and that it would become dirty and clogged, between the time of departure from appellees' yard after overhaul and the time of the first breakdown of the main engine ten days later (Aps. 942).

Looking now to the work claimed to have been performed on the lube oil cooler in appellees' yard and shops during repairs and overhaul under the contract, we find that appellees' pipe shop foreman, Mr. Oakland, testified that the oil cooler was brought to the shop by employees of the shipyard for cleaning and testing (Aps. 1437). Oakland stated that he cleaned out the coolers by using Jamlen's compound on the salt water side and another chemical on the oil side. He testified that these compounds were circulated through the coolers by use of a centrifuge pump. Thereafter he stated that he applied a 50-pound hydrostatic test to the cooler and that he found no leaks in the unit (Aps. 1438-39).

It is readily understandable why the leaks in the

lubricating oil cooler were not discovered by appellees' workmen when the 50-pound hydrostatic test was applied at the shipyard on Puget Sound. Mr. Demetri Antippas testified that he examined the oil cooler of the "Urania" as it was available in Seattle during the trial in the District Court and that a stamp on the casing of the unit prescribed 300 pounds pressure per square inch on the salt water side as the test pressure (Aps. 1382-83). This was the same oil cooler that was aboard the "Urania" at the time it was tested at the appellees' yard in 1948 and at the time of the two main-engine breakdowns. Later during the trial, when appellees sought to introduce another oil cooler unit in evidence for illustrative purposes (Aps. 1442), proctors for appellant advised the trial court and opposing counsel that the particular cooler unit from the "Urania" was available for introduction in evidence, but that it had not been offered as an exhibit because of its size, weight and bulk (Aps. 1443). After this statement was made the trial judge made the observation that an exhibit of this type was impractical because of the difficulty of incorporating it into the record in the event of appeal (Aps. 1443). The trial judge also stated that, "If you get all of the information submitted to the trial court in words, then you can get the same information exactly before any appellate court" (Aps. 1444). Consequently, appellant did not attempt to have the oil cooler admitted in evidence in its case-in-chief. Nor did proctors for the appellees make any demand for an opportunity to inspect the oil cooler as it was then available in Seattle during the trial.

Parenthetically, it may be stated that when appellant later sought during rebuttal to introduce the cooler for another purpose, namely, to rebut a statement by one of appellees' witnesses as to the design of a certain gasket (Aps. 1516), the appellees' objected strenuously to the admission of the oil cooler in evidence. The court sustained the objections as to its admissibility (Aps. 1714) and this Court later denied appellant's motion to permit additional testimony to be taken to support the identification of the unit so that it might be available as an exhibit before this court to assist in determination of the factual questions on this appeal.

As further conclusive evidence of the higher test pressures specified by the manufacturer of the lubricating oil cooler, attention is invited to the instructions contained in the operating manual for the main engine, which was offered and admitted in evidence as Respondent's (Claimant's) Exhibit A-16 (Aps. 874). This exhibit is before this Court on appeal in its original form by stipulation and order (Aps. 1729-33). On page 14 of this operating manual, issued by the main engine manufacturer, a chart is printed giving the following information relative to the lubricating oil cooler as installed aboard the "Urania."

"LUBRICATING OIL COOLER—PERFORMANCE DATA

Harrison H. E. — 1120-360 (one per engine)

LIQUID TO BE COOLED — S.A.E. 30 OIL

Operating pressure (Maximum)..... 75 psi

Test Pressure (with oil).....165 psi

COOLANT — SEA WATER

Operating Pressure (Maximum)..... 75 psi

Test Pressure (with water).....200 psi"

Mr. Weiler, the repairman who tested the lubricating oil cooler and other heat exchangers at Long Beach after the breakdowns testified that he used pressures of from 160 to 200 pounds (Aps. 1123). These are precisely the same pressures which are specified in the instructions printed in the main engine operation manual. (Respondent's Exhibit A-16.) Mr. Dupuy, Lloyds surveyor, recommended that the coolers be proved tight under a 100-pound hydrostatic test (Aps. 1216). Mr. Oakland, who conducted the test on the oil cooler for appellees, admitted that he did not obtain any instructions from Mr. Gallagher, the American Bureau surveyor, as to the pressure to be applied in testing the coolers (Aps. 1448). Mr. Oakland testified that he did not notice the stamp on the side of the cooler setting forth the manufacturer's specified test pressure of 300 pounds (Aps. 1453). Mr. Oakland admitted that he did not look for the manufacturer's plate specifying test pressures and that he might have found such a name plate if he had looked for it (Aps. 1458-59). S. W. Newell testified that the manufacturer of the cooler prescribed "a very extensive process to be followed in cleaning" coolers of this type (Aps. 979) and that cleaning of the cooler on shipboard is "impractical if not impossible" (Aps. 977).

Two of the appellees' witnesses sought to explain away the test pressure of 300 pounds per square inch, which Mr. Antippas had testified was stamped on a plate attached to the outside of the cooler units. These witnesses in effect claimed that the 300 pounds per square inch represented a maximum test pressure as

might be required under Navy construction specifications, and that such test pressure was not intended to indicate the amount of pressure to be applied in testing the units for leakage (Aps. 1515, 1560). Even if this court were to accept the explanation attempted by appellees' witnesses as to the test pressure stamped on the casing of the units, there would still remain in effect the test pressures which are indicated in the instructions contained in the operating manual (Respondent's Exhibit A-16), as shown above. Thus, the positive testimony of both witness Antippas and Respondent's Exhibit A-16 stands uncontradicted in this record to the effect that the manufacturer specified a test pressure from four to six times greater than the pressure claimed to have been applied by appellees' workmen during testing of and repairs to the lubricating oil cooler.

As to the ship repair yard's obligation in making tests upon this type of equipment, the statement of the Circuit Court of Appeals for the Second Circuit in *Pan-American Petroleum T. Co. v. Robins Dry Dock & R. Co.* (2 CCA) 281 Fed. 97 (cert. den., 259 U.S. 586; 66 L. Ed. 1076) is particularly applicable. The opinion of the court states, at page 106:

"The customary method pursued in making such tests not having been followed in this case, it would seem that it should affirmatively appear that the one actually adopted was equally effective; but that does not appear, and no explanation is given for the failure to make the test in the customary manner."

The failure of appellees' employees in this case to fol-

low the manufacturer's recommendations as to amount of pressure to be applied in testing the oil cooler for leaks as prescribed in the operation manual available aboard the vessel and as shown to have been visibly displayed on a plate fastened to the cooler unit itself was a negligent act which readily explains the disastrous consequences that followed when the vessel put out to sea on her first voyage. It can hardly be argued that the test that was actually made, at a much lower pressure, was "equally effective" within the above rule, when contamination of the oil in the cooler resulted in crippling the main engine of the vessel.

Although appellees attempted to prove that incompetence, negligence or improper operation of the main engine, and particularly the oil cooler, by the chief engineer and his assistants might account for the engine breakdowns, such efforts utterly fail in the face of affirmative testimony by several qualified expert witnesses to the contrary.

Thus, service engineer Cross, representing the main engine manufacturer, testified that the chief engineer, as observed by him during the performance of his duties aboard the vessel, was "very competent" (Aps. 1024). Mr. Pike, the American Bureau surveyor, stated that he observed the chief engineer performing his duties and that "he performed his duties around the engine for me very satisfactorily" (Aps. 1160). Surveyor Summers stated that he observed the chief engineer and "my opinion was that he was a good chief engineer, because he had an interest in the job. He came up in the shop to check the shaft in the lathe

and observed all of the steps in the repairs. * * * I would say that he was a good and competent engineer, yes" (Aps. 1265). Baxevanis, the chief engineer testified to many years' experience with operation of marine diesel engines up to 2800 horsepower (Aps. 693-95).

Baxevanis testified that prescribed maintenance procedure was followed in the engine room at all times before the breakdowns (Aps. 743-44). He further testified to changing oil filters when the lubricating oil was changed (Aps. 745). He also stated that between departure from the shipyard on October 16 and the first engine breakdown at sea on October 26 the ship's engineers did not make any repairs on the main engine (Aps. 744).

Appellees sought to prove that use of a standby fire pump to increase the pressure of the salt water coolant through the oil cooler might have caused leaks resulting in contamination of the oil. This effort fails in the face of the testimony of service engineer Cross to the effect that when the standby pump was used just prior to the second breakdown, the pressures were "within a safe operating range," (Aps. 998) and that the use of the fire pump did not increase the pressures running through the system beyond safe operating pressures (Aps. 1003). S. W. Newell also testified that use of a standby pump to increase salt water pressure through the oil cooler was considered good normal marine practice (Aps. 909).

We submit that the conclusion is inescapable that the two breakdowns of the main engine were caused by the negligent failure of appellees to perform their

obligations under the contract for repairs and alterations to the "Urania" in that appellees failed to properly clean, test and repair the lubricating oil cooler. This resulted in the vessel putting out to sea with a defective, dirty and leaky oil cooler and caused contamination of the oil with salt water during the course of the first voyage which in turn caused the main engine to break down on two occasions when the timing gears failed due to faulty lubrication.

Significantly, Mr. Cross sent a telegram from Manzanillo on November 1, after his first inspection of the vessel, which stated in effect that appearance of general workmanship done on the vessel at Seattle made it advisable for the vessel to return to some west coast U.S.A. port where all parts of engine could be closely inspected (Aps. 1042). He found the oil tubing badly kinked and other parts of the engine didn't work properly (Aps. 1043).

Again, it is significant to note that the specifications between appellant and appellees for main-engine repairs, Libelant's Exhibit No. 4, specified under item 1 that appellee was to "Furnish services of factory representative to supervise operation of diesel engine" (Aps. 256). Mr. S. W. Newell, representing the manufacturer of the engine, testified that on September 9, 1948, he instructed his factory representative at Tacoma, Washington, to make himself available for this work, but that appellees never requested the factory representative to assist with the repairs to the main engine and he did not perform any such service (Aps. 891-92).

Although Mr. Oakland claimed that he, on behalf of

appellees, had opened, cleaned and tested the coolers, Mr. Weiler, the repairman at Long Beach, testified that he found no evidence that the coolers had been repaired recently (Aps. 1126). In fact, Mr. M. L. Newell testified that when the coolers were opened up at Long Beach, the paint on the bolts necessary to disassemble the coolers was hardened so that in his opinion it must have been "a year—probably more" since they had been removed (Aps. 1117). There was no evidence that the coolers had been disassembled or covers unfastened or any work done on the coolers recently (Aps. 1114, 1117). There was no evidence that the cooler had been patched up or soldered (Aps. 1115). The zinc plates which are placed in such coolers to retard electrolysis were found to have only about 30% of the metal left when examined at Long Beach (Aps. 1100) indicating that they had not been recently replaced (Aps. 1117) as claimed by appellees' employee, Mr. Oakland (Aps. 1441).

In connection with the above, it is important to note the observation of the trial judge as to the candor of the appellees' witnesses in testifying as to the repair work performed on the "Urania." It is found in the court's Decision, appearing herein at page 70 of the Apostles, where it is stated:

"Some of the shipyard foremen or subforemen failed to relate from the witness stand very clear-cut narratives or accounts of what was done, or definite personal knowledge of details of the work actually done. In at least three instances, I thought libelant's (appellees') witnesses showed a surprising lack of personal recollection of the details of the work done." (Aps. 70)

This observation is of more importance on this appeal, since the trial court had the opportunity of personally observing appellees' witnesses while appellant's testimony in the main was given by deposition. On this appeal, the court will not have the disadvantage of contrasting deposition testimony with that given by witnesses appearing in person, since all testimony is now contained in the written record.

II. (a) Clayton Boiler Failure

Under Assignment of Error 6, appellant contends its evidence offered in the District Court clearly proved, as alleged in the cross-libel, that faulty repairs to the pumps on the Clayton boiler by appellees caused the unit to break down and fail to operate properly.

The appellees' workmen undertook to repair the pumps on the Clayton heating boiler as extra work (Item No. 14, Libelants' Exhibit No. 4, Aps. 262). This involved removal of the unit from the vessel to appellees' shop ashore, dismantling and disassembling the pumps and renewing some parts (Aps. 1475). All of this work was done by appellees' workmen under the direction of the machinist foreman for Commercial Ship Repair (Aps. 1475). The machinist foreman conceded, however, that he did *not* see the pump in operation aboard the ship after it had been reassembled in the shop (Aps. 1476).

Even before departure of the "Urania" from appellees' shipyard, difficulty was experienced in the operation of the pump on the Clayton boiler, which necessitated appellant's Seattle agents engaging an independent surveyor to determine the cause of the

difficulty and arrange with appellees to make corrective repairs (Aps. 754). The report of this surveyor (Respondents Exhibit A-6, Aps. 756-7), disclosed that the feed pump was leaking and not operating satisfactorily. The pump was not then disassembled, but the feed pump was repacked and emulsified oil was removed from the crankcase of the pump at that time (Aps. 758-9). Notwithstanding these attempted repairs, the Clayton boiler pump failed to function satisfactorily after departure of the "Urania" from appellees' shipyard, and when it was partially dismantled at sea by the chief engineer, broken parts and pieces were found in the unit (Aps. 744).

Upon arrival of the "Urania" at Los Angeles after main engine breakdowns a service representative of the manufacturer of the Clayton boiler went aboard the vessel and removed the complete pump unit to the manufacturer's shop for repair (Aps. 825). Upon further dismantling in the shop it was found that the positions of the pump heads had been changed in reassembling the parts incorrectly after recent repair, causing misalignment and crankshaft damage in the pump (Aps. 825, 827). After repair and replacement of broken parts by the manufacturer, the pump unit was reinstalled on the Clayton boiler aboard the "Urania" and it operated satisfactorily (Aps. 830). Record of the findings of the manufacturer's representative on the dismantling of the pumps, and the repairs made, is contained in Respondent's Exhibit A-15 (Aps. 1393-4).

(b) Failure of Telemotor Steering System

Appellant contends under Assignment of Error Number 7 that evidence offered in the District Court clearly proves that failure of the telemotor steering system was caused by faulty repairs made by appellees before departure of the vessel from the shipyard on October 16, 1948.

Appellees undertook to overhaul and test the steering system under the specifications in the original contract (Item 26 of Libelants Exhibit No. 1, Aps. 186). Appellees' machinist shop foreman, Harold Woodman, testified that while the "Urania" was in the yard he checked the steering engine and the telemotor, which latter unit is described as a hydraulic system connecting the controls in the pilothouse with the electric steering motor in the aft part of the ship (Aps. 1468-69). He stated that they found the steering system to be working properly. Woodman stated that the only repairs accomplished by machinists on the steering system were to put a little oil in the telemotor, get power on the motor, oil up the machinery and remove the blocks on the rudder quadrant (Aps. 1471-72).

Appellees' electrical foreman, Harold Wells, testified that while the "Urania" was in the yard he checked the wiring and connected up the micro-switches on the steering system (Aps. 1547). He admitted that the connection of the switches and wiring was in part by the "trial and error method" and that he did not obtain a wiring diagram to check the proper hookup (Aps. 1548-49). He stated that the system

was operated for one or two hours at the dock and it "appeared to be" in proper operating order (Aps. 1547).

Neither machinist foreman Woodman nor electrical foreman Wells was present to observe the operation of the steering system on a sea trial (Aps. 1468, 1549).

Another electrician, Lester Short, was sent from appellees' yard to Port Angeles to repair the electrical portion of the steering system after it failed on the date of departure from appellees' yard (Aps. 1529-30). He found the system to be oscillating or "hunting". After checking he stated that he found the cause of this failure was an improper adjustment of the hydraulic cam on the telemotor control unit (Aps. 1530).

Mr. Clarke, the surveyor engaged by appellant's Seattle agents, also went aboard the "Urania" at Port Angeles to ascertain the cause of the steering system breakdown and assist in arranging repairs (Aps. 760-61). He testified by deposition that the cause of the failure was a broken wire, "a floating break," in the electrical steering engine, which would make and break, causing the controlling motor to hunt (Aps. 766), as confirmed in his report of survey. (Respondent's Exhibit A-7, Aps. 763-64).

Again, we submit that the failure of the telemotor steering system within a few hours of departure from appellees' yard, together with the testimony of appellees' workmen showing inexperience, lack of knowledge, and "trial and error" method of repairs, clearly

indicates negligent failure of appellees to perform their obligations to repair. This is particularly true in view of the above-mentioned findings as to the cause of the telemotor steering system failure; namely, a broken wire or improper adjustment of the controller motor.

This court has, in *The Ecuador* (9 CCA) 1926 A.M. C. 342, 345, 346, 10 F.2d 769; and in *Lake Union Dry Dock & M. Works v. U.S.A.* (9 CCA) 79 F.2d 802, 1936 A.M.C. 250, 252; approved and followed the rules announced by the Court of Appeals for the Second Circuit in *Pan-American Petroleum T. Co. v. Robins Dry D. & R. Co.* (2 CCA) 281 Fed. 97 (cert. den. 259 U.S. 586, 66 L.Ed. 1076), as to the nature and extent of a ship repair yard's duties and obligations to a vessel and her owners, and also as to the burden of proof in such a case as the present one. In the *Pan-American* case, *supra*, the repairer contracted to overhaul the electric telegraph system of a ship. When the ship was returned to the owner for service the wires of the system were crossed so that signals correctly given on the bridge did not register properly in the engine room. In consequence of this hookup of the telegraph there was a collision with another vessel. A libel was brought against the ship repairer for resulting damages, the shipowner claiming that the shipyard had negligently failed to perform its contract obligations. In holding the ship repair yard liable for damages the court said, at page 108:

"It needs no citation of authorities to establish the elementary principle that, where skill is required in performing the bailee's undertaking,

as in the case of the work to be done on the electrical apparatus of this steamship, the bailee must be understood to have engaged to use a degree of skill adequate to the performance of his undertaking. (citing cases)

“And it is equally elementary that ordinary care is that degree of care which reasonably may be expected of one in the given circumstances. (citing cases) * * *. And from what we have said in a former part of this opinion it sufficiently appears, and for the reasons given, that we do not think the respondent exercised the degree of care which the circumstances of the case required of it.”

After pointing out that the liability of the respondent was not based on negligence or tort, but upon failure to properly perform the contract to repair the vessel, the court said, at page 109:

“But the libelant is in court alleging the non-performance of the contract, and the defendant (*sic*-respondent) is in court alleging that it performed the contract fully. The law is elementary that, where a defendant pleads performance, he assumes the burden of proof. If an affirmative contract to perform some duty is proved, it is then incumbent on the defendant to prove performance or a sufficient excuse for the failure to perform. (citing cases) * * *.

“The burden was on the libelant to prove the contract, and that at the time the respondent delivered back the ship the telegraph was not properly adjusted and in good working condition. This burden was sustained. The presumption then arose that the respondent had not performed its contract, and was responsible for the condition in

which the telegraph then was. The burden then rested on the defendant (*sic* respondent) to overcome this presumption, and to establish by a preponderance of the evidence that it had fully performed its agreement, and that the crossing of the wire and chain connection of the ship's telegraph was not due to its workmen's lack of skill, or careless conduct of the work, while the ship was in the respondent's possession."

In the present case appellant has proved, and appellees certainly will not dispute, a contract undertaking by appellees to clean, test and repair the lubricating oil cooler, to overhaul, replace parts and repair the Clayton heating boiler and to test and repair the telemotor steering system of the "Urania." These undertakings were testified to by appellees' own employees and witnesses, and charges for this work make up the claims for which appellees brought the libel against the vessel. In the *Pan-American* case, *supra*, the ship-owner sustained the burden of proving that the telegraph was not properly adjusted by proof of its faulty operation and testimony of witnesses as to their finding wires improperly hooked up. Likewise, we submit that in the present case, appellant has proved that the oil cooler, the Clayton boiler, and the telemotor steering system were not properly tested, repaired and adjusted by appellees by testimony of various witnesses that the several units were found to be not functioning properly either at the time of redelivery of the vessel on completion of repairs or within a short period of time thereafter. Beyond this, we submit that appellant has succeeded in proving that no other cause other than nonperformance or malperformance of appellees'

obligations could possibly have caused or contributed to the failure of the several units of machinery aboard the "Urania."

The failure in performance of appellees' obligations to repair the vessel render appellees liable upon the cross-libel for resultant damages. Thus, in the *Pan-American* case, *supra*, the court said, at page 106:

"To deliver over the ship with the wires double-crossed was not good workmanship and was not a compliance with the contract under which the respondent agreed with the libelant to perform certain work upon the ship, including that of overhauling and adjusting the engine room telegraph 'according to good steamship practice and with workmanship of the best quality'."

Damages

Of the fifteen items of damage set forth in the cross-libel (Aps. 20-21), appellant waived its claim to some items during trial, values were stipulated by proctors as to some items, and on other items appellant offered uncontradicted proof as to values and payment. To simplify consideration of these items on this appeal the following tabulation has been made showing the disposition of each item.

<i>Cross-Label Item No.</i>	<i>Nature of Claim</i>	<i>Cross-Label Amount</i>	<i>Exhibit Reference</i>	<i>Disposition on Appeal, Supporting Testimony, or Stipulation of Proctors</i>	<i>Amount Claimed on Appeal</i>
1.	Repairs to Clayton boiler and generator at Long Beach.....	\$ 678.86	Resp. A-15 Aps. 1393	Aps. 1389-90, admitted as to labor items only — disallowing parts	\$ 336.76
2.	Removal of ammunition bulkhead not effected	275.00	Item 36 in Lbts. Ex. 1, Aps. 189	Aps. 329 — disallowance by trial court not assigned as error on appeal.....	nil
3.	Expenses incurred during delay at Winslow, Wash.	3936.00	Resp. A-1 Aps. 228	Disallowance by trial court not assigned as error on appeal	nil
4.	Loss of profits during delay at Winslow, Wash.	4000.00	Resp. A-1 Aps. 228	Disallowance by trial court not assigned as error on appeal	nil
5.	Telemotor repairs at Pt. Angeles, Wash.	262.51	Resp. A-5 Aps. 628	Aps. 753 and see discussion in brief.....	262.51
6.	Deviation to Pt. Angeles, for telemotor repairs	310.00	Resp. A-5 Aps. 628	Aps. 656-57 proves 12 hrs. delay. Stipulation of proctors, Aps. 1348, fixes \$250 per diem..	125.00
7.	Towage after breakdown from Manzanillo, Mex. to Los Angeles, Calif.	4286.00	Resp. A-25 Aps. 1304	By stipulation of proctors, Aps. 1302-06 amount agreed	4118.00
8.	Engine repairs at Long Beach, Calif.	4475.00	Resp. A-17 Aps. 1308-20	By stipulation proctors, Aps. 1306 amount agreed	4275.00
9.	Miscellaneous corrective repairs....	3214.00		No testimony offered — waived.....	nil
10.	Corrective cleaning of tanks.....	2157.00		No testimony offered — waived.....	nil
11.	Additional fuel consumed on account deviation for repairs.....	974.00	Resp. A-27 Aps. 1400	Aps. 1422-24 and discussion in brief.....	692.25
12.	Disbursements at Manzanillo.....	969.00	Resp. A-9 Aps. 1354	Supporting exhibits not admitted.....	nil
13.	Disbursements at Los Angeles.....	1911.00	Resp. A-24 Original on file	By stipulation of proctors, Aps. 1301 amount agreed	1409.89
14.	Expenses vessel during repairs.....	7252.00	Resp. A-24 Original on file	By stipulation of proctors, Aps. 1348 amount agreed at \$250 per diem.....	7000.00
15.	Loss of profits during corrective repairs	7000.00	Resp. A-25 and A-26, Aps. 1401 and 1361	Aps. 1403-08, Aps. 1357-65.....	7000.00
				Total	\$25,219.41

Thus, as to items numbered 2, 3, 4, 9, 10 and 12, no contention is made on this appeal that any damages should be allowed by a decree on the cross-libel.

The proof of Item 1, Clayton heating boiler repairs, was restricted by the trial judge, on admission in evidence of Respondent's Exhibit A-15, to the cost of labor, exclusive of cost of parts (Aps. 1391). As to the amount of \$336.76 claimed on this appeal, the evidence is uncontradicted that the work was performed, the charges were reasonable, and the amount was paid by appellant (Aps. 831, 1390).

As to Item 5, cost of telemotor repairs, the charges included in the total of \$262.51 are made up principally of appellees' own invoice for furnishing workmen to perform the corrective repairs (Aps. 629), together with the surveyor's fee. Obviously, no effort was made by appellees to contradict these charges.

As to Item 6, appellant now claims the amount of \$125.00 as damages for loss in deviation to Port Angeles for telemotor repairs. This is calculated on the basis of log entries (Respondent's Exhibit A-8, in original form per order, Aps. 1732) and testimony of Capt. Beis, the master (Aps. 656-57) which show a loss of 12 hours' time during the deviation to Port Angeles for repairs. Appellees have stipulated that the reasonable operating expense of the "Urania" was \$250.00 per diem (Aps. 1348). Allowing for one-half day, or 12 hours, the damages are proved to be \$125.00.

Item 7, covering cost of towing the "Urania" to Los Angeles after the second breakdown at sea, in the sum of \$4275.00, was agreed upon by stipulation

of proctors to be reasonable in amount and its payment by appellant was also stipulated (Aps. 1302). Its relation to the breakdown of the "Urania" is patent from the testimony of various witnesses as to the failure of the main engine and the necessity for towage assistance.

Ample testimony was given by officers and employees of Union Diesel Engine Company as to the necessity for and the reasonableness of charges for main engine repairs under Item 8. In fact, proctors for appellees stipulated as to the reasonableness of these charges in the adjusted amount of \$4275.00 and their payment by appellant (Aps. 1306).

The cost of additional fuel consumed by the vessel and claimed under Item 11 was calculated and testified to by Mr. Antippas (Aps. 1422). Due allowance was made for varying rates of consumption dependent upon whether the vessel was under way at cruising speed or was merely operating auxiliaries or on standby while in port or in tow of the salvage tug (Aps. 1423-24). The cost of this oil was proved on the basis of market price at San Pedro at the time of replenishment of bunkers in November, 1948 (Aps. 1425), and receipted invoice for fuel actually furnished to the "Urania" on November 17, 1948 (Respondent's Exhibit A-27, Aps. 1400).

Proctors for appellees stipulated as to the reasonableness of charges and payment in the sum of \$1409.89 for miscellaneous disbursements made at Los Angeles during period of corrective repairs, which are claimed as a recoverable item of dam-

ages under Item 13 (Aps. 1301). An examination of these items as they appear in Respondent's Exhibit A-24 (not printed in Apostles, but original a part of record on appeal per order, Aps. 1732), will clearly indicate their relation to the various other elements of delay and corrective repairs necessarily made at Los Angeles.

As to Item 14, appellant now claims the amount of \$7000.00 as damages for loss due to operating expenses of the "Urania" during periods of breakdown off Manzanillo through repair at Los Angeles and until the "Urania" resumed her intended course and voyage. A total loss of time of 28 days is claimed. This lost time is calculated as follows:

First breakdown of vessel off Manzanillo, Mexico	October 26
Vessel arrived Los Angeles in tow sal- vage tug	November 11
Repairs completed and vessel departed Los Angeles for Manzanillo to re- sume voyage	November 17
Vessel arrived and departed Manzanillo, resuming voyage from approximate point of first breakdown.....	November 23
<hr/>	
Total elapsed time.....	28 days (plus)

(per Aps. 660-61, 729, 1019-20, and Respondent's Exhibit A-8, log book entries in original form per order, Aps. 1732-33). Here again, appellees' stipulation as to reasonable operating expense of \$250.00 per diem results in proved damages for 28 days' delay of \$7000.00.

Appellant claims its loss of profits during periods of breakdown and repair under Item 15. In proof of such damages, appellant offered testimony of Mr. Wallace, agent for the "Urania" at Seattle, as to attempts made to secure employment for the vessel in September or October, 1948 (Aps. 1357). The witness testified as to prospects of a charter in the molasses trade between the Philippine Islands and Japan (Aps. 1359). Although the charter never materialized, it is appellant's contention that the negotiations thereon were indicative of the prospective value of this particular vessel in the charter market and that such testimony and Respondent's Exhibit A-26 (Aps. 1361) should have been admitted and considered as competent evidence to prove the claim under Item 15 for loss of profits.

Of still more importance in connection with appellant's proof of Item 15, relating to loss of profits during breakdown and repairs, was the ruling of the trial court sustaining objections to the offer in evidence of Respondent's Exhibit A-25 (Aps. 1401). Appellees objected to testimony of Mr. Antippas as to this time charter party on the vessel in December, 1948, which appellant offered, to show what profit was actually realized on the vessel. This ruling of the trial court in excluding the time charter offered as Respondent's Exhibit A-25 is one of the assigned errors relied upon by appellant, being Assignment of Error Number 12 (printed in full in appendix). Respondent's Exhibit A-25 is also reproduced as an appendix to this brief, as required by Rule 20 of the Rules of Practice of this Court.

Loss of profits due to detention of a vessel while repairs are being made has been recognized as a proper item of damages by this court, which has also recognized the practical impossibilities of proving the damages with certainty. Thus, in *Aktieselskapet Bonheur v. San Francisco & P.S.S. Co.* (9 CCA) 1923 A.M.C. 375, 377, 287 Fed. 679, the court said, at page 682:

“Where the damages alleged to have been sustained in the interim of detention arise by reason of loss of earnings, the inquiry is not whether they could possibly have been made by the use of the vessel, but whether they would have been made; and, as anticipated earnings of the vessel cannot always be certainly ascertained and definitely proven, it suffices if they are proven circumstantially and with a reasonable degree of certainty.”

See also annotations on “Liability of one contracting to make repairs for damages for improper performance of the work” in 1 A.L.R. 1654 and 44 A.L.R. 824, the latter annotation citing *Pan-American Petroleum T. Co. v. Robins Dry D. & R. Co.*, *supra*, in support of the general rule.

The Circuit Court of Appeals for the Second Circuit has recognized and allowed the shipowner loss of profits against a ship repair yard for periods of delay and detention computed on the basis of what the vessel would have earned under a charter. In *The Penelope* (2 CCA) 1945 A.M.C. 541, 545, 148 F.2d 884, the court stated:

“The wrongful detention therefore caused her to begin earning hire 31 days later than she other-

wise would. The fact that actually she was off hire for sixteen days instead of eight because the owner did the work unnecessarily slowly is, as the district judge said, immaterial, since during those days the ceiling prices for charter hire remained unchanged. Demurrage should be computed for thirty-one days."

The U. S. Supreme Court, after recognizing loss of profits as a proper element of damage for a maritime tort, has stated the rule as to proof of such damage in *The Conqueror*, 166 U.S. 110, 127, 41 L. Ed. 937, 945 as follows:

"In the absence of such market value, the value of her use to her owner in the business in which she was engaged at the time of the collision is a proper basis for estimating damages for detention, and the books of the owner showing her earnings about the time of her collision are competent evidence of her probable earnings during the time of her detention."

Since the "Urania" would have been available on the east coast for charter purposes during November, 1948, but for the breakdowns and consequent delay, we submit that the best evidence to establish the loss of profits sustained by appellant due to breakdowns causing delay in arrival would be the value of the vessel in the charter market in that month and the months immediately succeeding and following, and the profits actually obtained from such a charter in December, 1948. An examination of the testimony and exhibit offered, to which objections were sustained, clearly indicates that the amount of \$250.00 per day claimed by appellant as loss of profits was

less than the per diem profit actually earned by the vessel in December, 1948 (Aps. 1407). That the proof of profits made in December, 1948, was competent to establish loss of profits in October or November, 1948, is established by the above authorities. This is particularly true since the witness Antippas testified as to a decline in the charter market in December from values in October and November (Aps. 1407). We submit that this testimony and Respondent's Exhibit A-25 should have been admitted in evidence, and that with such evidence before the Court, appellant has made ample proof to sustain a decree awarding \$7000.00 under Item 15 representing allowance of loss of profits for 28 days during deviation, delay and corrective repair periods (Aps. 47, 1424-25).

CONCLUSION

The contentions of appellant may be summarized as follows:

1. *Main Engine Breakdowns* (Assignments of Error 8, 9, 10 and 13):

Appellant has sustained the burden of proving by a preponderance of the evidence that appellees failed to properly perform their obligations by contract to overhaul, test and repair the main engine of the "Urania," and more particularly the lubricating oil cooler forming a part thereof, and have proved by competent testimony of experts that the two breakdowns of the main engine of the "Urania" were caused by the faulty or negligent performance, or nonperformance, of appellees' obligations. Appellees' testimony falls far

short of controverting the above or establishing that the overhaul, testing and repair of the lubricating oil cooler was performed in a proper, workmanlike manner, according to good shipyard practice or manufacturer's specifications. Therefore, appellant is entitled to a decree against appellees on the cross-libel for the damages proved to have resulted from such failure in performance of obligations.

2. (a) *Clayton Boiler Failure* (Assignment of Error Number 6) :

Appellant has sustained the burden of proving by a preponderance of the evidence that appellees did not properly perform their obligations by contract to overhaul, replace parts, reassemble and place in good operating condition the Clayton heating boiler aboard the "Urania," and more particularly the pump unit thereon. Appellant has proved by competent testimony that this unit of machinery did not function properly after overhaul and reassembly by appellees and in fact was found to have been reassembled improperly, causing the failure. Therefore, appellant is entitled to a decree against appellees on the cross-libel for the damages proved to have been sustained by reason of such failure in the performance of appellees' obligations.

(b) *Failure of Telemotor Steering System* (Assignment of Error Number 7) :

Appellant has sustained the burden of proving by a preponderance of the evidence that failure of the telemotor steering system was caused by faulty repairs and hookup of controls on this unit of machin-

ery in the course of appellees' undertakings by contract to overhaul and test the system. Appellant is entitled to a decree against appellees on the cross-libel for the amount of damages proved to have resulted from such failure in the performance of appellees' obligations.

3. *Damages* (Assignment of Error 12 and other assignments mentioned above):

The trial court erred in sustaining appellees' objections to the offer in evidence by appellant of Respondent's Exhibit A-25, a time charter party on the vessel for a period in December, 1948. This charter party was properly identified and was competent evidence, if not the best evidence available, to establish the earnings of the vessel to calculate demurrage or loss of profits.

Other elements of damage claimed by appellant on this appeal have been either proved by competent evidence, or appellees have stipulated as to the reasonable value of the items and to their payment. All items now claimed by appellant are recognized as items properly allowable under the circumstances.

According to statement of these items presented earlier in this brief, the total amount now claimed by appellant on the cross-libel, under the Assignments of Error relied upon on this appeal, is the sum of \$25,219.41.

We ask that this Court weigh the evidence and consider the argument made on behalf of appellant and then order that a decree be entered in favor of

appellant and against appellees on the cross-libel for such damages as the Court finds are due and have been proved.

Respectfully submitted,

MERRITT, SUMMERS & BUCEY,

LANE SUMMERS,

CHARLES B. HOWARD,

Proctors for Appellant.

APPENDIX

I.

ASSIGNMENTS OF ERROR RELIED UPON BY
APPELLANT

The trial court erred as follows:

(6) In finding that work performed by libelants on the Clayton boiler aboard respondent vessel was performed in a competent, workmanlike manner and in accordance with good shipyard practice; and in failing to find to the contrary, and that the failure in operation and the damage sustained to the said Clayton boiler was caused by malperformance or non-performance of libelants' obligations under the additional work specifications.

(7) In finding that work performed by the libelants on the telemotor steering system aboard the respondent vessel was performed in a competent, workmanlike manner and in accordance with good shipyard practice; and in failing to find that the breakdown of said telemotor system near Port Angeles, Washington, was due to failure of the libelants to properly perform their obligations under the original contract specifications to open up, test and adjust the telemotor, and report any deficiencies found therein to claimant's representative.

(8) In finding that all work done on the main engine of respondent vessel, save that work done by riggers, was done at the direction of and under the supervision and control of the respondent vessel's chief engineer, and that libelants (cross-respondents) undertook no duty on their own responsibility to deter-

mine the extent of repairs, servicing or testing necessary, but did only what the chief engineer directed pursuant to contract stipulation; and in finding that all of the work performed by libelants' employees on the main engine of the respondent vessel was done in a competent and workmanlike manner, and that it was accepted and approved by claimant corporation (cross-libelant).

(9) In finding that claimant corporation (cross-libelant) failed to sustain the burden of proof as to the cause of the main engine breakdowns off the west coast of Mexico on October 26 and November 5, 1948; and in the failure of the court to find that said breakdowns were caused by defective workmanship and material furnished to respondent vessel by libelants under the original contract and additional work specifications.

(10) In the failure of the trial court to find that the breakdowns of the main engine on October 26 and November 5, 1948, were proximately caused by the malperformance or nonperformance of libelants' obligations under the additional work specifications on respondent vessel by reason of the improper testing and negligence in repairing or failure to repair leaks existing in the lubricating oil cooler installed on said main engine, resulting in salt water contamination of the lubricating oil which, in turn, caused galling of the vertical gears on the main engine and resulted in such breakdowns of the main propulsion engine on the respondent vessel while at sea.

(12) In ruling that photostatic copy of charter

party on respondent vessel (cross-libelant's identification A-28) identified by witness Demetri Antippas, and his testimony as to profits under such charter party, which identification and testimony were offered by cross-libelant as proof of earnings of the vessel on charter voyage after the voyage upon which the breakdown occurred, were not admissible in support of cross-libelant's claim for loss of profits during periods of loss of use of the respondent vessel due to breakdowns alleged to have been caused by defective workmanship and materials furnished by libelants. Offer of identification A-28 and testimony in support thereof were objected to by one of cross-respondents' proctors as follows:

"MR. WHITE: May we object upon the ground, first, that there is no foundation laid that a boat could possibly have been chartered here which would support such testimony as this; and secondly, that this was a different time, under different conditions, with different parties, carrying a different product.

"I submit to the Court that under those circumstances this could have practically no weight as far as showing any loss of profits is concerned."

* * * * *

"MR. WHITE: I object to that, Your Honor, on the ground that what the charter market might have been on the East Coast in December would have no bearing upon the issues in this case, since if there is any loss of profits it is during the month of October, around there.

THE COURT: That objection is sustained.

* * * * *

“MR. WHITE: I object to that, Your Honor, on the grounds as stated before; different conditions, different product, different time, different parties involved.

“THE COURT: The objection is sustained as to this particular proposed charter.

“MR. HOWARD: I would like to make a very brief statement. This vessel broke down on the West Coast of the United States or Mexico. Obviously, it would not be possible to charter a vessel during the period it is broken down.

“We submit that we should be entitled to prove by this witness what the vessel earned when it did get back to the East Coast after repairs had been made, because we obviously could not testify as to the earning power of the vessel during the period it was broken down.

“THE COURT: You could prove by some witness who knows what the charter market was for a vessel of this type during the period of the breakdown.

“The objection is sustained and the Court will disregard the statement of the witness regarding the profits of this charter.

“MR. HOWARD: At this time, for the purpose of the record, I offer Identification A-28.

“MR. WHITE: That is objected to on the grounds previously announced.

“THE COURT: Sustained. Admission is denied.”

(13) In finding that cross-libelant was not entitled to recover any damages claimed in the cross-libel as amended at the time of trial; and in denying to cross-libelant its damages in the sum of \$36,329.37 against cross-respondents as shown by the evidence,

for the cost of corrective repairs, towing services, additional vessel operating expenses, loss of profits, additional fuel consumed, and agency expenses incurred as a result of the several breakdowns of the vessel due to defective workmanship and materials furnished by libelants.

APPENDIX

II.

CORRECTIONS IN APOSTLES

We note the following corrections in the Apostles on Appeal:

Page viii of index, Gallagher re-cross, "1090" should read "1691."

Page 239, line 27, "olny" should read "only."

Page 325, line 30, "Would be" should read "Would you."

Page 389, line 3, "Mr. Kokanson" should read "Mr. Hokanson."

Page 421, line 20, "Mr. Tokanson" should read "Mr. Hokanson."

Page 886, line 8, "course" should read "coarse."

Page 923, line 11, "stated" should read "state."

Page 973, line 29, "ingine" should read "engine."

Page 1108, line 16, "curret" should read "current."

Page 1127, line 15, "he" should read "the."

Page 1131, line 4, "wihch" should read "which."

Page 1251, line 8, "thae" should read "that."

Page 1297, line 11, "seat" should read "sea."

Page 1303, line 22, the first "Exhibit 25" should read "Exhibit 24."

Page 1511, line 28, "ourt" should read "court."

Page 1574, line 21, "ashed out" should read "washed out."

Page 1585, line 19, "not" should read "no."

Page 1669, line 12, "khat" should read "what."